Australian Energy Market Commission

THE HITCHHIKER'S GUIDE TO THE NEM: WHAT WAS THE QUESTION AGAIN?

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Introduction

When I was a Treasury Secretary, it was not unusual when sitting around with my colleagues from other jurisdictions for the conversation to turn to the relationship with our various Auditor Generals. Similarly, when I was an Australian Government Departmental Secretary I attended two days of bi-annual talks between Australian and Canadian Government Department heads from all portfolios. As people were taking their seats on the first day I whispered to an Australian colleague, “Fifty bucks says we don’t get to afternoon tea without a collective whinge about Provinces and States.” We didn’t make it to morning tea.

So it was not surprising when sitting down with a group of Canadian and US utility regulators a few months back that the conversation turned to comparing notes on their relationship with government, consumer and environmental groups and the businesses they regulate. Basically they were discussing the difference in the perceptions and objectives of these groups and the difficulties that these differences posed for them as regulators.

At one point in the conversation I said …“You should read Plato’s *Republic*”… I was met with blank looks “…You know, the Allegory of the Cave……” Finally a regulator from Ontario said "Are all Australian regulators so nerdy?” Keen to dispel such notions I replied “…Well *Hitchhikers Guide to the Galaxy* then.” There were signs of recognition but still uncertainty as to the relevance to the topic under discussion.

The story goes something like this…

“A race of hyper-intelligent beings build a super computer called Deep Thought…our energy systems…to find the answer to the Meaning of Life, the Universe and Everything…the public interest test often given to regulators in North America or the long term interests of consumers in Australia. When Deep Thought says that the answer is 42, the hyper-intelligent beings can't relate the answer to the question so they build another computer…the Earth…to find the question that will give meaning to the answer. It seems to me that different people come up with different answers because they are answering different questions. Might be useful if we agree on the question up front, don't you reckon?"

When viewed in an international context Australia's national electricity market – or "NEM" – is rather unique and somewhat enviable. For *most* of its 15 year history, the NEM has performed well against a range of indicators including price, timely investment, reliability, safety and security. More recently, sharply rising retail prices, falling demand, low average but volatile wholesale spot prices, and other developments have caused some to question whether the system is still performing well.

I have heard suggestions that the wholesale *energy only* NEM design should be reconsidered in light of the Renewable Energy Target whose design has more in common with so called *capacity "markets"*, where the quantity of generation investment is determined by a central authority rather than by the balance of demand and supply with its associated risk allocation.

There has also been a lot of discussion around the way monopoly transmission and distribution networks are regulated in the wake of price increases flowing from past regulatory determinations, and various aspects of the retail sector's operation.

And of course the gas sector is going through its own series of "questionings".

In pondering further changes to the energy sector, it is important to recall "what was the question again?" without which we risk getting an answer we don't want or understand. We need to be clear about what we want our energy system to do; the underlying cause of current concerns; whether existing governance arrangements will develop solutions; and the relationship with broader policy and external regulatory settings and institutions, including those designed to address climate change.

A series of reviews and other focused investigations have already taken place or are underway that explore some of these issues. In the last five years alone the Australian Energy Market Commission (AEMC) has completed 29 electricity market reviews, at the request of Energy Ministers, examining issues within and across the NEM, the networks and the retail markets.[1]

In addition, the AEMC recently completed significant rule changes involving an assessment of the arrangements for the economic regulation of network service providers. We currently have another nine reviews underway, which includes a review of energy retail competition in New South Wales. These two projects provide good examples of changes within the existing market arrangements that can promote greater efficiencies.

The improvements identified in recently completed work or work underway should help leverage the benefits offered by Australia's liberalised electricity sector. It is a program of work to move towards completing the reform of the electricity sector that was started by creating the wholesale NEM.

[1] Among the major reviews we have or are undertaking are the Transmission Frameworks Review, Power of Choice Review, NEM Financial Market Resilience Review and reviews of the framework for setting reliability standards for transmission and distribution networks.

A trilogy in Five Parts

This paper starts by looking at the policy question the NEM was designed to answer.[2] It then moves to a broader discussion of the electricity sector, involving the NEM, the networks, the retail markets, as well as the overarching regulatory and policy arrangements.

I will focus on two of the AEMC's proposed strategic priorities for energy market development - the first relates to market arrangements to support efficient investment; the second to the central role of the electricity consumer. In this context it discusses the AEMC's recent rule changes for the economic regulation of network businesses, touches on the AEMC's Power of Choice review findings, and ends with a discussion of the AEMC's current review of energy retail competition in New South Wales.

1. Knowing where your towel is (and not throwing it in)

The NEM has performed well historically and delivered timely investment to meet growing demand. However the investment environment has recently changed.

Consumers in most states have been paying higher electricity prices in recent years. Over the past four years the cost of electricity for households has risen on average by around 70 per cent nationally.[3] At the same time, some generation businesses are experiencing financial strain with depressed wholesale prices and declining demand. Generation capacity has expanded through investment in renewable technologies that is supported by Renewable Energy Target and feed-in-tariff revenues, paid by electricity consumers but separate from the NEM.

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[2] The NEM is a term that is sometimes used as a proxy for the broader electricity sector. It may be useful to clarify upfront that the NEM is separate to the retail markets and distribution networks that interface with consumers – it is a wholesale market designed to promote more efficient trading of wholesale electricity between generators and retailers.

[3] Department of Resources, Energy and Tourism, The Facts on Electricity Prices, http://www.ret.gov.au/Department/Documents/clean-energy-future/ELECTRICITY-PRICES-FACTSHEET.pdf

So is the NEM still the answer in this current environment? That ultimately depends on the way you frame the question. It has been over two decades since the NEM was a twinkle in the eye of its makers. What was the question policy makers were asking again?

The design of the NEM largely began in the early part of the 1990s. This was a period of substantive microeconomic reform across the Australian economy largely in response to Australia's poor relative and absolute economic performance. In the mid- 1970s and 80s Australia was experiencing low output growth, low GDP growth, high inflation, high unemployment and low terms of trade; some spoke of the risks of becoming a banana republic. It was in this environment that the desire for national economic reform gained momentum, with a particular focus on competition policy and lifting the productivity of the non-traded goods sector. With lumpy capital intensive electricity a vital input to a range of industries, and evidence of over investment in generation capacity with the costs being passed on to consumers, improving the efficiency of the electricity sector was viewed as a key ingredient in lifting Australia's overall economic performance.

The resulting transformation of the sector can be described in many ways and from different perspectives. A fundamental question that was answered then and remains just as relevant in today's discussions however is "How do you the want investment risks to be allocated?"

A different risk allocation is perhaps the defining feature that distinguishes the NEM from the vertically integrated utility industry structure of old and the "capacity markets" found in some other jurisdictions. In the latter, an "authority" plans investment based on expectations of future supply and demand on behalf of consumers. By necessity the costs are passed onto consumers. And so are the risks. If forecasts turn out to be inaccurate, and as we have seen this tends to be the case, and there is over investment, prices *rise* and consumers pay for what turns out to be inefficient investment.[4] In the NEM design, generation businesses in competition with one another make these investment decisions.[5] They may be no better at forecasting the future than were the utilities, however over investment results in *lower* prices and equity bears the cost of inefficiency – a very different risk allocation and very different incentives for efficiency.

I would suggest that any discussion of how to improve the NEM or how the NEM is affected by policy or regulatory changes needs to explicitly address this question of how risks are allocated…and we need to be comfortable with the answers.

Policy and regulatory decisions need to be guided perhaps, not so much by taking projections or forecasts as a given, but by clarify around how risks are to be allocated.

2. Life, the universe and the NEM

The creation of the NEM during the 1990s involved an arguably unprecedented level of cooperation between states, territories and the Commonwealth government and those directly involved in the sector in developing the policy, testing the design and implementing the structural reform.

The NEM and the energy retail markets were designed to operate as competitive markets with regulation focused on safety, reliability and consumer protection. The networks are natural monopolies that require revenue or price regulation. This clear demarcation between the competitive and monopoly parts of the sector is important in thinking about

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[4] For example, the ERA 2012 report to the Western Australian Energy Minister stated "the direct costs of excess capacity to consumers in the 2011/12 year is estimated at approximately $26 million. Moreover, the investment in excess capacity could have been better spent elsewhere in the economy; hence there are indirect costs to the economy as well as direct costs to consumers. Whilst the extent of this total cost to the economy has not been quantified, it is clear that it is not an economically efficient outcome." Economic Regulation Authority, 2012 Wholesale Electricity Market Report for the Minister for Energy, 19 April 2013, pp 5-6.

[5] and it must also be said dis-investment decisions.

electricity sector issues. Though changes in technology over time, for instance with respect to metering or distributed generation, mean we must remain open to the possibility that where this line is drawn may change.

In most Australian states contestability in retail markets was introduced. Open access arrangements for monopoly network services were developed. State-based utility business models were redesigned and some of these were sold to the private sector. The competitive wholesale market (the NEM) was created and new contract forms and markets emerged.

COAG created a new governance structure for the energy sector that replaced a number of jurisdictional and Commonwealth bodies, helping to provide consistency and stability in regulating the interconnected NEM and other aspects of the energy market. The Australian Energy Regulator (AER) and the Australian Energy Market Commission (AEMC) were established in 2005 and the Australian Energy Market Operator (AEMO) was created in 2009. More recently, COAG oversaw the development of a national framework – the "NECF" – to promote a consistent approach to energy consumer protections and to transfer state and territory legislation to a single set of laws, regulations and rules.

The AEMC is currently working with KPMG to review and document the lessons that can be learnt from the process that led to the creation of the NEM. Major inter-state policy developments require the question being addressed to be clearly and consistently articulated, detailed policy development, design and testing, but also – very importantly – extensive work with all the affected stakeholders. I would suggest that the development of the NEM provides a useful case study in inter-state, cooperative policy development. One that can be improved upon no doubt, but useful nevertheless. We will be publishing a joint report with KPMG on the findings of the analysis later this year.

2.1 Strategic thinking “We demand rigidly defined areas of doubt and uncertainty”

The AEMC is currently undertaking its second strategic priorities review as part of its statutory market development role for electricity, gas and elements of energy retail markets. The review is to identify strategic priorities for energy market development over the medium and longer-term, which should help to address existing and emerging issues in electricity and gas markets. The Commission has proposed three priorities, two of which relate to empowering consumers and effective market arrangements.

The Commission’s third proposed priority focuses on the implications of major changes in the gas sector on the east coast of Australia with the development of substantial LNG export capacity. We have undertaken a scoping study to understand whether the current arrangements are fit for purpose. The Commission will be releasing the conclusions of our work and proposed next steps in the coming months, and I will have more to say on these issues at that time.

2.2 Improvements to the existing frameworks “Even an improbability drive needs coordinates which I happen to have”

The electricity sector is yet to realise the full range of benefits offered by a liberalised electricity market. Considerable work has already been implemented or undertaken to identify a suite of necessary changes in the competitive and monopoly sectors. Collectively this should help address key issues around retail electricity prices, retail market competition, network investment and reliability, and generator investment signals.

Before we discuss the details of specific improvements within the sector, it is important to note that the quality of the market outcomes will depend on the quality of the overarching policy and regulatory processes.

In managing changes, the *Consistency Theorem* applies. The theorem states that if a change is going to meet its objectives, and not set you on a course of putting band-aids on band-aids, a necessary but not sufficient condition is that the:

- policy and economic implications;
- financial and commercial impacts; and
- technical and operational aspects

need to be aligned and consistent with one another. There is little point addressing a problem in one of these areas by a means that introduces problems in others.

Change will always be a feature of energy markets and policy and regulatory arrangements, but it is important that the manner in which change is managed is transparent, based on clear objectives and relatively predictable. Attracting finance, for instance, to the Australian energy sector at competitive rates requires a policy environment that investors understand and that is relatively stable, with transparent and well understood processes for any policy changes.

The sector's institutional structure and in particular the separation of roles between the AEMC and the AER is unusual compared to other countries. We understand that investors generally appreciate the value of these separate roles in promoting a transparent and predictable regulatory regime.[6]

The rule change and review processes administered by the AEMC are highly transparent, predictable and consultative. Nonetheless, the Commission is always eager to identify

[6] A survey conducted by RBC Capital Markets of investors following the network regulation rule change process in 2012 found that "the rule change process gave confidence in the overall governance structure in place for regulating network utilities: Separation of AEMC ('policy setter') and AER ('regulator')". See RBC Capital Markets, "Investor perspectives on energy market reform", Presentation by Paul Johnston to the ENA forum, 24 July 2013.

process improvements that promote efficient, timely and quality outcomes. In its report, the Productivity Commission raised concerns that the rule change process can often take too long. In particular, it raised concerns about the length of rule change processes that follow from the reviews undertaken by the AEMC for the SCER.[7] We have also been conscious of this concern through discussions with stakeholders.

The Commission is considering options that might be available to improve timeliness of the rule change process without undermining the features of the rule change process that stakeholders tell us very clearly they value – extensive consultation, an opportunity to scrutinise the detailed rule drafting and a clear explanation by the AEMC of the reasons for our decisions. I am particularly keen to explore how we can move more rapidly from the conclusions of our reviews to rule changes that implement the conclusions accepted by SCER.

I would encourage stakeholders to talk to us over the coming months with ideas on how we can improve the rule change process. The Commission is very much at the stage of exploring options and ideas, and will be open to discuss any suggestions that can improve the process.

3. Don't panic

The AEMC has proposed that one of the three strategic priorities for energy market development should be market arrangements that encourage efficient investment and flexibility. Decision-making and investment in the energy sector will always occur in an environment in which there is some uncertainty. Consequently, the market arrangements need to be flexible enough to facilitate investment options that best meet current and future requirements, without creating barriers or distortions that affect decision-making.

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[7] Productivity Commission 2013, *Electricity Network Regulatory Frameworks*, Report No. 62, Canberra, pp 797-805

This is the case for both the monopoly regulated network sectors and the competitive generation and retail sectors of the industry.

Achieving these outcomes is a key focus of the AEMC as the rule maker and market developer. A recent example of this approach involves the regulatory framework for network businesses, or the "poles and wires". Network costs have been the largest driver of recent electricity price increases and consumers have questioned whether increases in network costs have been at the minimum level necessary to provide the level of reliability they seek.[8]

Network businesses build capacity to be sufficient for expected demand. The reliability of the network is linked to the capacity and redundancy available in the network which is dependent on levels of demand at different times.

When the expectations for the level of reliability change, so too does the level of investment required to meet those expectations. Following a small number of high impact power failures experienced in Australia, as well as overseas, some state governments were prompted to increase reliability standards as well as bushfire safety. This has increased the investment requirements for those network businesses.

At the same time, peak demand or the maximum electricity use in the network, grew at a rate of 1.8 per cent each year over the period between 2005 and 2011 while total energy demand grew 0.5 per cent per year over the same period.[9] Such a change in the way electricity is used and when affects investment requirements. This has meant that networks

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[8] The AER submitted to the Senate Select Committee on Electricity Prices that "the most significant contributor to the price rises over the last five years in each state has been the impact of rising network costs – accounting for 35-50 per cent of the total rise." AER, *Senate Select Committee on Electricity Prices*, Submission, September 2012, p. 5.

[9] AEMO, *2011 Electricity Statement of Opportunities*, August 2011.

have been expected to build sufficient capacity to meet higher reliability standards in the context of peak demand increasing relative to energy consumption.

Several network businesses have also embarked on major replacement programs for infrastructure that was installed in the 1950s and 1960s in the post-war growth period. Compounding the challenges network businesses were facing, there was the global financial crisis which meant that finance costs were higher for a period of time.

As a result, costs were increasing above previous levels for a number of years. The AER reports that energy network investment expected in the current five year regulatory cycle increased over the previous regulatory cycle by around 27 per cent in transmission and 60 per cent in distribution in real terms.[10] However, since these regulatory determinations were made demand growth has been lower than expected. Network businesses have responded by reducing capital expenditure.[11] The reduced capital expenditure will flow through to lower than otherwise network prices.

In NSW, retail prices are forecast to decline.[12] Nevertheless many would argue that network prices are still higher than is necessary especially since network costs can be up to half of retail bills in some states.[13]

It is worth recognising that there are at least three main drives at play here: the legal and regulatory framework; the application of the framework by the regulator; and the corporate governance of the businesses.

[10] AER, State of the Energy Market 2012, 2012, p. 69.

[11] AER, State of the Energy Market 2012, 2012, p. 70.

[12] IPART estimates that average regulated prices will fall below inflation in 2014 and come down by 6.9% from 1 July 2015. IPART, “Final Report – Regulated Electricity and Gas Prices”, Media Release, 17 June 2013.

[13] The AER reports that between 37 and 50 per cent of retail bills can be attributed to network charges, depending on the jurisdiction. AER, Senate Select Committee on Electricity Prices, Submission, September 2012, p. 3.

The work of the AEMC focuses on the legal and regulatory framework, specifically the rules which underpin the AER's regulation. The AER and the Australian Competition Tribunal, through the Limited Merits Review regime, apply the legal and regulatory framework. The corporate governance of the businesses is determined by the businesses' owners, and the managers within the businesses themselves.

The legal and regulatory framework in Australia recognises the limitations of regulation – primarily that the regulator does not have the same information about running the business as the business does ("information asymmetry"). Hence the regulation of revenues in Australia focuses on incentives for businesses to reveal their efficient costs by capping a forward looking estimate during a regulatory determination and allowing businesses to be rewarded for being more efficient than the regulatory estimate. Consumers benefit as these lower costs flow through to the next regulatory period.

Keeping the business in the driver's seat is preferable to having the regulator make investment decisions on its behalf on a project by project basis. The regulator's strength is not in running a business or making individual investment decisions. Its strength lies in its power to limit prices and revenues which drives management to improve productivity, when combined with effective corporate governance that demands appropriate returns from the funding provided. The interests of consumers and investors can be aligned in that they both benefit when effective regulation and corporate governance work together to provide management with the incentives to operate efficiently in order to satisfy both.

3.1 More than 42 changes to the NER

Last year, the AEMC introduced a number of new and revised rules which govern the AER's regulatory decision making for electricity and gas network businesses. The new rules better equip the AER to achieve efficient outcomes for consumers…and manage the risk allocation between them and the equity in the business.

The changes to the rules primarily involve:

- a new rate of return framework;
- new tools for the regulator to incentivise network businesses to invest efficiently;
- clarification of the AER's existing powers, for instance to undertake benchmarking of the relative efficiency of businesses; and
- changes to the regulatory process to enhance stakeholder involvement, particularly community and consumer representatives.

The new regulatory arrangements were the subject of a recent survey of investors by the Royal Bank of Canada (RBC). RBC found that the stability of the regulatory regime was the most important aspect of regulation for investors, followed by consistency of decisions and the predictability of outcomes.[14] The same survey found that overwhelmingly the investors surveyed viewed the changes to the rules as positive with 79 per cent agreeing that the changes will improve regulation.[15]

The AER is now in the process of developing guidelines, required under the new rules, on how it intends to apply them in consultation with consumers and industry - the "better regulation" program. These new arrangements will impact on network prices as the next determinations commence. The first businesses – TransGrid, Ausgrid, Endeavour Energy and Essential Energy in NSW – will all have determinations under the new rules with effect from 1 July 2014. The new rules will also apply to the determinations of Transend in Tasmania and

[14] RBC Capital Markets, "Investor perspectives on energy market reform", Presentation by Paul Johnston to the ENA forum, 24 July 2013.

[15] 74% Agree and 5% Strongly Agree. See RBC Capital Markets, "Investor perspectives on energy market reform", Presentation by Paul Johnston to the ENA forum, 24 July 2013.

ActewAGL in the ACT from 1 July 2014. They will apply from the following year, 1 July 2015, to Energex and Ergon in Queensland and SA Power Networks in South Australia.

New rules may be necessary to increase the incentives for efficient network prices but they are certainly not sufficient. The AER's "better regulation" program and approach are critical. Moreover, the Australian Competition Tribunal is the appeal body for decisions made by the AER and so how it interprets the new rules will also have a bearing on the outcomes for consumers. The SCER recently announced changes to the limited merits review process that will focus the decisions of the Tribunal on the long term interests of consumers.[16]

The new rules require the interests of consumers to be more clearly linked with regulated businesses' investment plans. These changes recognise that whilst the role of consumers is the same in regulated monopoly and competitive markets, how that role is expressed is invariably different.

4. Zaphod Beeblebrox's two heads – consumers' roles in monopoly and competitive markets

As consumers ourselves, we have experience voicing demand through our choices. If we don't like a price or service, we go to a competitor. But how do we as consumers demand better price and service outcomes in a monopoly regulated environment? And how do consumers engage in the increasingly complex regulatory process?

In the regulated monopoly sector, consumers contribute to more efficient outcomes in revenue and pricing determinations by providing another voice. The perspectives and motivations of consumers can influence the variety of evidence submitted to the regulator.

[16] SCER, Regulation Impact Statement: Limited Merits Review of Decision-Making in the Electricity and Gas Regulatory Frameworks, Decision Paper, 6 June 2013.

A variety of perspectives and evidence has a role in regulatory decision making as with many issues there is no single, objective answer. As a result, the broader the set of evidence the regulator is able to draw upon, the more potentially robust the decision making. For example, determining the cost of capital illustrates the potentially divergent approaches to estimation with evidence running hundreds of pages submitted to the regulator from regulated businesses. Assembling relevant evidence and participating in regulatory determination processes requires specific expertise, which can be costly.

In recognition of the potential to improve regulatory decision making by including consumer voices, the SCER recently agreed to develop a national consumer advocacy body. While there are a number of consumer advocacy organisations in place today, they have differing mandates and resources, and generally operate at the state level. The new body is to be set up from 1 July 2014 and will have dedicated funding which recognises the need to pool resources at the national level in order to participate in the AER's determination processes.[17]

Consumers can also contribute to the regulatory process by participating in the development of the regulated businesses' investment plans. The new network regulation rules were designed specifically to encourage greater input from consumer advocates, as well as individual consumers and local communities. These new rules include longer consultation periods and plain language documents to facilitate broader engagement in the regulatory determination process. It also requires the AER to consider the engagement the network businesses themselves undertake to support their investment programmes and service outcomes when making determinations.

[17]SCER Communique May 2013: http://www.scer.gov.au/files/2011/09/SCER-Communique-May-2013.pdf

This is intended to encourage the development of consumer engagement programmes by the network businesses. Such programmes could include finding out what consumers are willing to pay for different levels of reliability, for example the historical work undertaken by ActewAGL.[18]

SA Power Networks has already launched a consumer consultation programme, which includes consumer workshops and an online survey, for the development of its next regulatory proposal.[19]

The aim of these changes to the rules is to encourage network businesses to seek out the views of their consumers. Finding out what consumers want is the natural domain of a competitive market player. In a monopoly regulated environment there is less incentive to do so.

Just as the role of consumers in the regulatory process is changing, so too is the role of consumers in retail energy markets. From both an industry and regulatory perspective, consumers are increasingly becoming more active participants as opposed to passive users of a homogenous commodity, as electricity has traditionally been viewed.

The AEMC's Power of choice review revealed that there are potentially material savings available across the system if consumers are provided with information, charges to reflect the value of using electricity at different times and technology to enable them to change their consumption behaviour.[20]

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[18] NERA and ACNielsen, Willingness to pay research study, A report for ACTEW Corporation and ActewAGL, September 2003.

[19] See http://talkingpower.com.au/consultation-approach/

[20] AEMC, Power of choice review – giving consumers options in the way they use electricity, Final Report, 30 November 2012.

Energy retailers are responding to consumer interest in their energy use by providing customised advice and information directly to customers via platforms, such as web portals and mobile phone applications.

This kind of engagement and retailer responsiveness is most readily observed in Victoria, where retail price regulation was removed in 2009. Last year the South Australian government announced the removal of regulated prices. These changes move retail markets towards the fully competitive retail markets that were envisaged when the NEM was developed.

We are now reviewing the NSW energy retail markets after contestability has been in place for a longer period prior to our review than was the case in Victoria[21] and South Australia.[22] Our draft report was released in May and found that competition was effective. Our final report will be delivered to SCER in September.

Consumers are taking advantage of the choices the competitive market is offering and benefiting from their decisions. Over 60 per cent of consumers have chosen to be on a market contract rather than the regulated price. Market contracts offer average bill savings of around six per cent off the regulated retail price,[23] but much higher discounts are

[21] Full retail contestability was introduced in 2002 and the AEMC's review of the effectiveness of competition was finalised in February 2008. See AEMC, Review of the Effectiveness of Competition in Gas and Electricity Retail Markets, Issues Paper, 1 June 2007.

[22] Full retail contestability was introduced in January 2003 for electricity and July 2004 for gas customers. The AEMC's review of the effectiveness of competition was finalised in December 2008. See AEMC, Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia, Issues Paper, 14 March 2008.

[23] AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, Draft Report, 23 May 2013, see chapter 4.

available.[24] Benefits are not just in price though, as many retailers offer other choices to customers such as different payment and contract terms or tariff structures.[25]

Consistent with these outcomes, our market research found that consumers have a high degree of awareness of the option to choose their retailer. When the AEMC reviewed Victoria and South Australia the awareness rate was at 94 and 82 per cent, respectively, with NSW in the middle with an awareness rate of 90 per cent.[26] With this high degree of awareness and potential benefits on offer, it is no surprise that switching rates are also high, as 21 per cent of consumers switched suppliers last year.[27] While switching rates are an indicator of competitive market activity, it does not necessarily imply that consumers are confident with all their choices when they do switch.

Consumers told us that while they were generally satisfied with their electricity supplier, there was a lot of information available and it was confusing and complex. They also said that the information was not the right type or in the right form to help them to help them make a decision about an energy offer that suited them.[28]

The advent of retail competition in traditionally supplier restricted markets has challenged regulators and governments. Industries such as banking, insurance and telephony require consumers to choose from myriad providers and weigh up various pricing structures and conditions. As these markets have developed, we have seen the market respond with the

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[24] See energymadeeasy website as discounts vary based on location and application.

[25] AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, Draft Report, 23 May 2013, see chapter 4.

[26] AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, Draft Report, 23 May 2013, p. 32.

[27] AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, Draft Report, 23 May 2013, p. 32.

[28] AEMC, *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales*, Draft Report, 23 May 2013, see chapter 8.

introduction of broker services, comparison websites and user-led forums to help consumers make decisions.

However, we have also seen responses from government to support consumers' decision-making through initiatives such as comparison rates in consumer finance, the limitation of certain language in mobile pricing plans, fact sheets, performance reporting and so on. This is on top of general consumer protection provisions which apply to all market sectors.

In Australia's retail energy markets a similar situation has developed regarding the proliferation of information and related commercial support services. Energy market development means that more retailers are entering the market and more products are potentially tailored to different customer groups' needs. The importance of choice in the electricity market reflects that there are differentiated needs, such as high and low consumption, despite the homogenous physical characteristics of electricity. This is the essence of the benefits of competitive markets. In Victoria, where there is no price regulation, products are more tailored to different customer needs. However, the proliferation of choice requires consumers to be able to choose which products suit their needs with confidence. Consumers are telling us that they are a little bamboozled by all the information.

The Commission has agreed with the NSW government to develop a consumer engagement blueprint. The objective is to encourage market outcomes where consumers are confident they have the right information to choose an energy plan that suits their needs.

In developing our consumer engagement blueprint the Commission will be talking to consumers through qualitative and quantitative research to find out what it is they need to feel confident making choices in the marketplace. Specifically, we have assembled a number of focus groups as well as an online and telephone survey which can be used as a baseline to measure any changes in future.

The Commission has also established working groups with consumer representative organisations and retailers to get their views on what has and can be done to support consumer decision making. A broader set of consumer representatives will also be interviewed by our market research team. The Commission will be delivering its final report and recommendations on the effectiveness of competition at the end of September. The consumer engagement blueprint will be delivered at the end of October.

In addition to the above, the Commission has also been talking to consumers who haven't switched to find out why. A number of studies being done around the world are finding that there is a proportion of consumers that struggle to engage in the market or choose not to and we're interested to find out who those customers are. We are undertaking a separate stream of analysis that seeks to identify broad demographic characteristics of those consumers that are still on regulated tariffs. This will enable us to ascertain whether specific engagement or support programs may be appropriate.

It is being increasingly recognised that not all consumers may want to engage in the electricity market. Engagement may not be worth their time or effort. It may be that their time is more valuable compared to the potential savings expected, or their bills may be a small proportion of their total expenses and incomes.

The energy regulator in the UK (Ofgem) has found that there is a spectrum of engagement that encompasses these two extremes. This includes a range of consumer types from some that may not engage beyond paying their bills whereas other consumers will be very engaged by constantly looking for better deals.[29]

The aim of any consumer engagement program then is to support those that are engaged, as well as to encourage those that may want to engage by providing the right information. Research from New Zealand following the launch of a campaign designed to nudge consumers to switch, and assist them in the process, found similar results to Ofgem regarding the number of consumers that do not switch.[30]

One result arising from our initial research is that engagement is not necessarily just about picking an energy plan. That is, consumers that do not switch may still actively manage their energy use. This means that different market offers, structures and innovative platforms have the potential to benefit consumers that are willing to change their behaviour. It may also be the case that by simply switching to a different arrangement and providing information in an appropriate form to do so, their consumption pattern will result in overall lower bills.

As set out in the AEMC's Power of Choice review, enabling technologies such as smart meters and similar services empower consumers in this way to control their energy use, but it also adds to complexity. Therefore, the results of our research will inform the types of information and communication tools consumers want to aid their decisions in choosing an energy plan in a competitive market and in managing their energy use with enabling technologies.

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[29] Ofgem, *The Retail Market Review – Findings and initial proposals*, 21 March 2011, p. 29.

[30] See: www.ea.govt.nz

5. So long, and thanks for all the fish

The NEM and the broader sector have performed well historically. They have delivered timely investment and a reliable supply of electricity. However the investment environment has changed.

Some industry participants have suggested that the design of the NEM should be reconsidered in light of recent changes in the market. Others have suggested that the broader electricity sector structure is not working and have suggested full-scale reviews of the industry.

Market design, policies and regulatory frameworks should not be dependent on a particular forecast or bet as to the future. They need to respond consistently to whatever happens.

The AEMC and other organisations are in the process of implementing a reform program that leverages the benefits offered by eastern Australia's liberalised electricity sector; without raising uncertainty or creating a new set of issues that would accompany a fundamental redesign of the sector.

This reform program recognises the critical role of consumers in the sector. Changes to the network regulation process are providing a stronger voice for consumers. We are also finding opportunities to further empower consumers in retail markets to receive the electricity services that are right for them.

It is critical that an understanding of risk allocation features clearly in any discussions about changes to the electricity sector.

In short, the Hitchhikers Guide to the NEM entry would read:

“When assessing changes to competitive, regulation or policy sectors of the universe:

- know what the question is that you are trying to answer – so you will know what to do with the answer;
- always take your towel with you with “How are risks allocated?” printed on it;
- manage the change process in a way that takes your fellow travellers with you – or at least have some idea of where you are going;
- always apply the consistency theorem; and
- remember consumers are at the centre of the universe, not waiting in a restaurant at the end of it.”